	Application No.	Applicant(s)
Notice of Allowability	10/720,055	MELAMED ET AL.
	Examiner	Art Unit
	Kuen S. Lu	2167
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to 9/12/2006.		
2. The allowed claim(s) is/are 1, 5-9, 11-12, 15-17 and 19-22 ( renumbered to 1-15).		
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have been received.</li> </ul>		
2. Certified copies of the priority documents have been received in Application No.		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
·		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal P	atent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. 🛛 Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. ⊠ Examiner's Amendr	
Paper No./Mail Date  4.	8. Examiner's Stateme	ent of Reasons for Allowance
or biological material	9.  Other	

Application/Control Number: 10/720,055 Page 2

Art Unit: 2167

## **DETAILED ACTION**

This action is responsive to Applicant's Amendment filed September 12, 2006.
 Amendments made to claims 1-4, 8-10, 12-14, 16, 18-20 and 22 are acknowledged. Also acknowledged are amendments made to Abstract. Specification and Drawings to

ackilowiedged are arriendifients made to Abstract, openication and brawings to

overcome Examiner's objections made in the non-Final Office Action of May 23, 2006. The

amendments are accepted and the objections are hereby withdrawn.

2. After a thorough search and examination of the present application and, in light of the

amendments filed September 12, 2006 canceling claims 2-4, 10, 14 and 18, amending

claims 1, 8-9, 12-13, 16, 19, 20 and 22, a telephone interview conducted November 19,

2006, Examiner's amendment made 11/22/06 (including amending each of independent

claims 1 and 12, canceling dependent claim 13 and incorporating into claim 12 and making

claim 20 dependent upon 1), and the prior art made of record, claims 1, 5-9, 11-12, 15-17

and 19-22 (renumbered to 1-15) are allowed.

later than the payment of the issue fee.

## Examiner's Amendments

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

Authorization for this Examiner's amendment, listed below, was given in a telephone interview with inventor, Mr. Konstantin Melamed on November 20, 2006. The interview summary is attached.

Application/Control Number: 10/720,055 Page 3

Art Unit: 2167

**3.1.** Please amend Claims 1, 12-13, 15-16 and 20 as follows:

Claim 1. (Currently Amended) A method of web-interface mediated testing of the functionality of a graphical user interface (GUI) object comprising:

- (a) selecting an XML encoded test case for execution on a host machine using a web-interface provided by an application server, wherein said test case comprises one or more GUI object test steps;
- (b) selecting the host machine on which to run said test case using said webinterface provided by said application server, said host machine comprising an automation tool and a whole or partial copy of the computer readable code of the software GUI <u>object</u> being tested;
- (c) encoding a test case file comprising the one or more GUI object test steps of said selected test case and the name of an automation tool GUI environment file;
- (d) transmitting said. XML encoded test case file from said application server to said selected host machine;
  - (e) receiving said XML encoded test case file; and
  - (f) decoding said XML encoded test case file the contents thereof;

wherein said decoding comprises generating a test script by parsing GUI object functionality syntax recognized by said automation tool from said XML encoded test case file; and

(g) receiving a copy of the automation tool GUI environment file;

Application/Control Number: 10/720,055

Art Unit: 2167

(h) loading said test script, said automation tool GUI environment file, and said whole or partial copy of the computer readable code of the GUI being tested into said automation too; and

Page 4

- (i) executing said. loaded, test script using said automation tool thereby testing said GUI; and
  - (i) storing a result in a database, thereby testing the functionality of said GUI.
- Claim 12. (Currently Amended) A computer system for web-interactive GUI testing of GUI object functionality comprising:
- (a) an application sewer suitable as a web server operatively coupled to a database wherein said application server comprises a computer readable storage medium having computer readable code means for providing a web interface to one or more users, computer readable code means for populating said web-interface with data gathered from said database, and computer readable code means for populating said web-interface with data received and means for receiving data from one or more host machines,
- (b) one or more user machines in communication with said application server suitable, said user machines comprising computer readable storage media including computer readable code means for interacting with the web interface provided by said application server, and
- (c) one or more host machines in communication with said application server, said one or more host machines comprising computer readable storage media including an

automation tool, a full or partial copy of the computer readable program code of a GUI object to be tested, and computer readable code means for loading an XML encoded

test case and parsing said an XML encoded test case into a test script, an automation

tool GUI environment file, and the computer readable program code of said software

application into said automation tool and executing said test script by said automation

tool and computer readable code means for directing said test script to be executed

by said automation tool;

(d) computer readable program code means for selecting an XML encoded teat case,

(e) computer readable program code means for selecting a host machine.

(f) computer readable program code means for encoding an. XML test case file

wherein said test case file comprises one or more GUJ o Jett test steps and the name

of an automation tool GUI environment file; and

(g) computer readable program code means for sending to a host machine said XML

encoded test case file.

Claim 13. (Currently Canceled)

Claim 15. (Currently Amended) The computer system according to claim 1312 wherein

the application server further comprises computer readable program code means for

scheduling the execution of said selected test case on said selected host machine,

wherein said scheduling comprises a time and a date for executing said selected test

case on said selected host machine.

Claim 16. (Currently Amended) The computer system according to claim 1312 wherein the application server further comprises computer readable code means for enabling a user to author an XML encoded test case using said web interface wherein said user adds GUI test steps or modifies existing GUI test steps by selecting from a plurality of GUI objects.

Claim 20. (Currently Amended) -A-The method for managing GUI testing requirements of claim 1 further comprising:

- (a) providing a web interface wherein one or more users can create one or more requirements folders using said web interface and saving said one or more requirements folders in a relational database coupled to an application server that provides said web interface,
- (b) providing a web interface wherein one or more users can create one or more test cases using a web interactive authoring tool and saving said one or more test cases in a relational database coupled to an application server that provides said. web interface, wherein said test cases comprise one or more GUI object test steps, and
- (c) providing a web interface wherein one or more users can sort said one or more test cases within said one or more requirements folders; and
  - (d) providing a means for encoding said one or more test cases into XML format.

## Reasons For Allowance

**4.** The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for non-Final Rejection of May 23, 2006, 35 U.S.C. 35 U.S.C. § 102, rejections to claims 1-19 was based on Glenn et al.: IPsec-WIT, "The NISP IPsec Web-based Interoperability Test System", National Institute of Standards and Technology, 2000, hereafter "Glenn"; and 35 U.S.C. 35 U.S.C. § 102, rejections to claims 20-21 was primarily based on Glenn and further in view of Hogan et al.: "Information Technology Measurement and Testing Activities at NIST", Journal of Research of the National Institute of Standards and Technology, vol. 106, No. 1, January-February 2000, hereafter "Hogan".

In the Remarks filed on September 12, 2006, concerning claims and 12, the Applicant pointed out that Applicant's steps (a) – (c) test functionality of object in a GUI, not just an implementation of graphical in nature as Glenn teaches. Applicant further argued that an automation tool GUI environment file is not taught in Glenn. Applicant also mentioned the difference between test cases in HTML and XML, where Glenn and Applicant respectively teaches, mainly, person having ordinary skill in the art could not use the same Perl script to parse the XML encoded test case commands as to parse out HTML encoded test case commands. A different script that interprets XML code would have to be written.

Art Unit: 2167

As for 35 USC 103(a) rejections to claims 20-21, Applicant argued that Hogan does not teach the testing of a GUI, XML encoded test cases or test scripts that include syntax that tests the functionality of GUI objects.

After further consideration of Applicant's amendments made to claims 1, 8-9, 12-13, 16, 19-20 and 22 and Examiner's amendment further amending claims 1, 12-13, 15-16 and 20, Examiner is persuaded that Applicant's above points of view are valid with respect to the mostly recently amended claims, which include the steps of implementation in great details, have overcome the teaching of the cited Glenn and Hogan references.

An updated search for the prior arts on EAST database and on domains (NPL-ACM, Google.com, NPL-IEEE) has been conducted. The prior arts searched and investigated in the database and domains does not fairly teach or suggest the teaching of the newly amended claimed subject matter as described above and reflected by the combined elements in the independent claims 1 and 12.

The dependent claims in the groups (1, 5-9, 11 and 20-21) and (15-17, 19 and 22), depending directly or indirectly upon claims 1 and 12, respectively, are also distinct from the prior art for the same reason.

Art Unit: 2167

**5.** Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **Contact Information**

**6.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll free).

JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Kuen S. Lu. Patent Examiner, Art Unit 2167 November 22, 2006